

## STELLA-FRESNEL

~25° beam for warehouse and outdoor lighting.  
 Compatible with up to 30 mm LES size COBs.  
 Variant with black frame.

### SPECIFICATION:

Dimensions	Ø 90.0 mm
Height	23 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

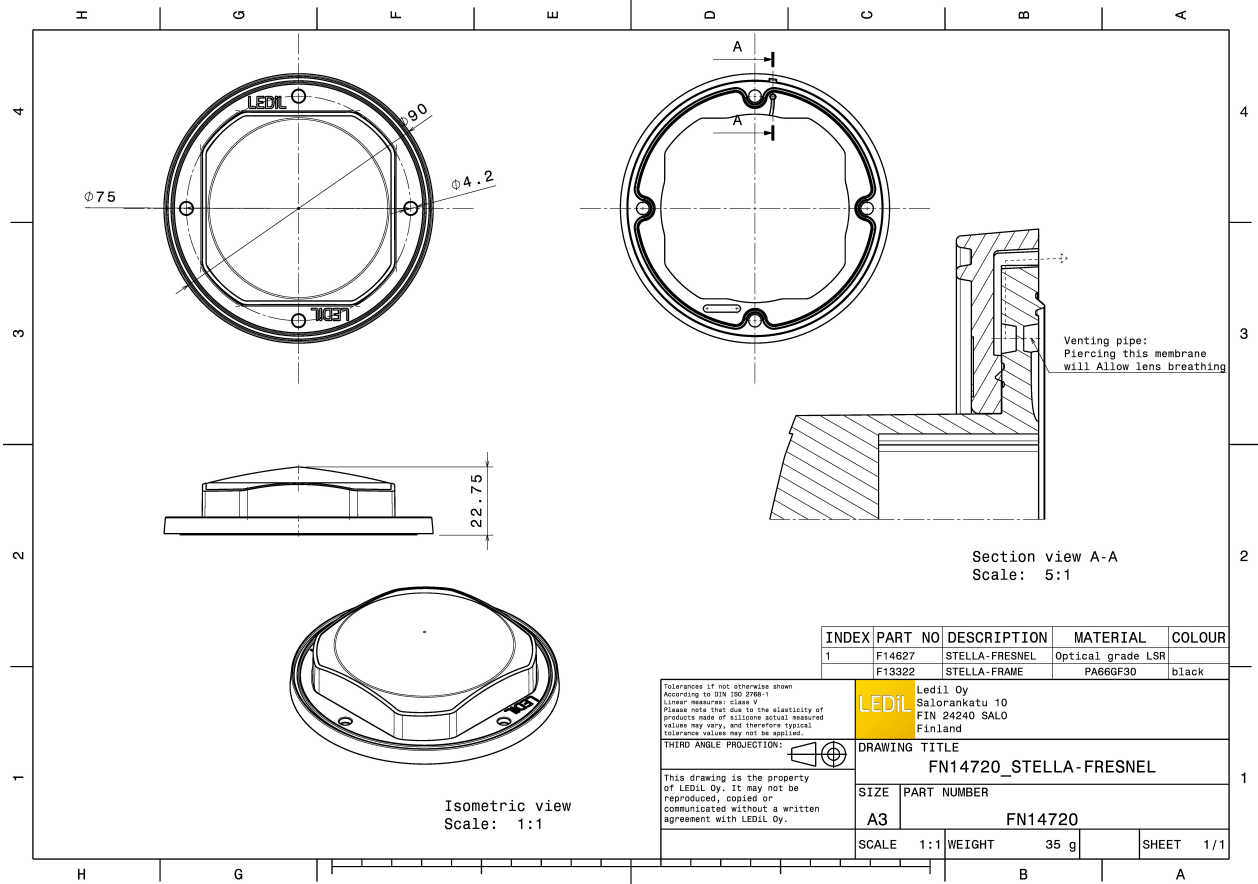


### MATERIALS:

Component	Type	Material	Colour	Finish
STELLA-FRESNEL	Single lens	Silicone	clear	
STELLA-FRAME	Holder	PA66	black	


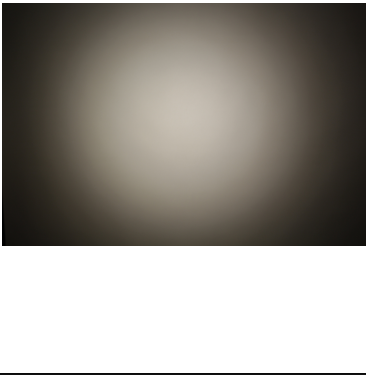
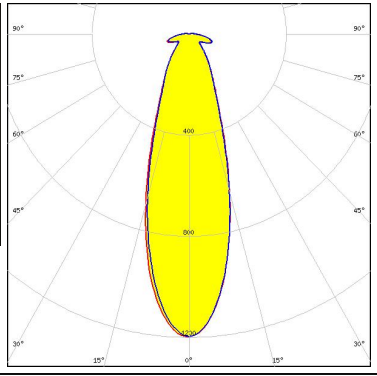


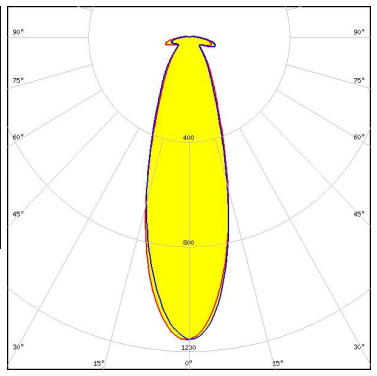


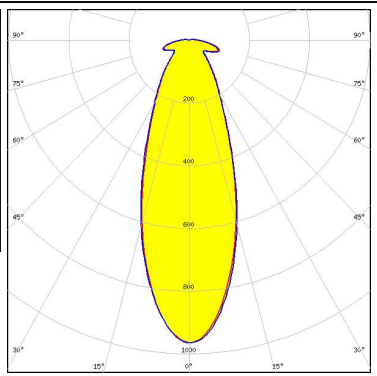

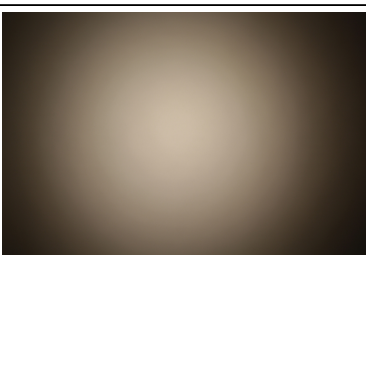
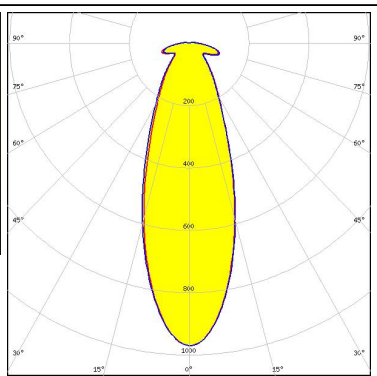
### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
FN14720_STELLA-FRESNEL » Box size: 480 x 280 x 300 mm	Single lens	80	80	10	4.0


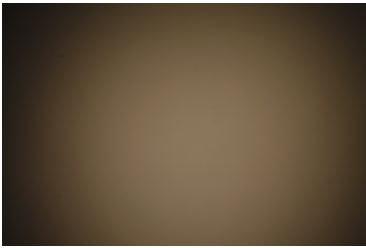
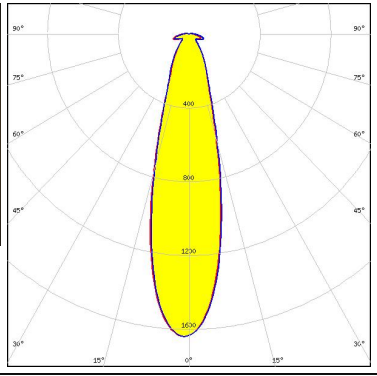

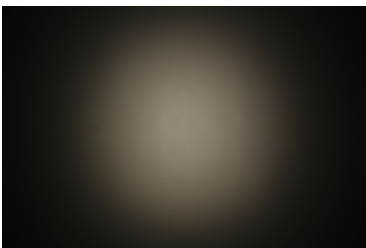
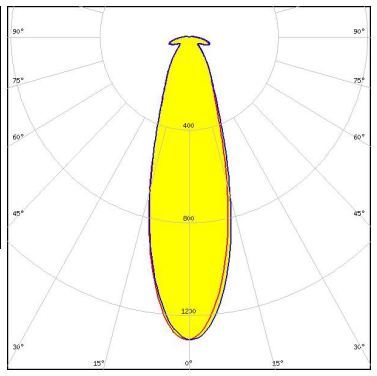

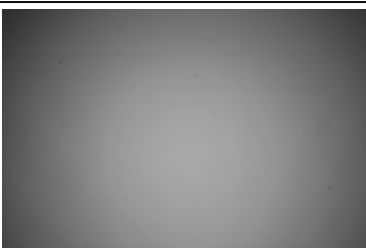
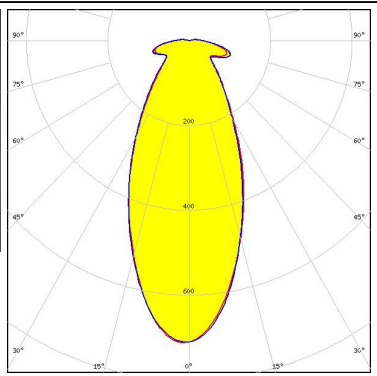

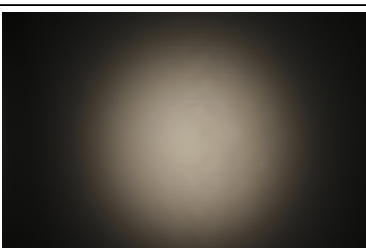
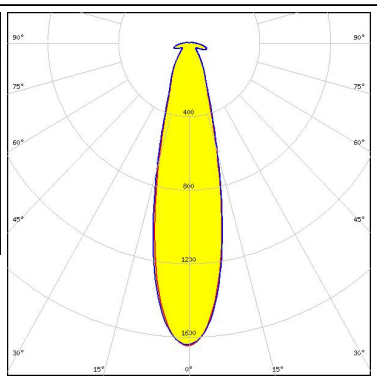


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):


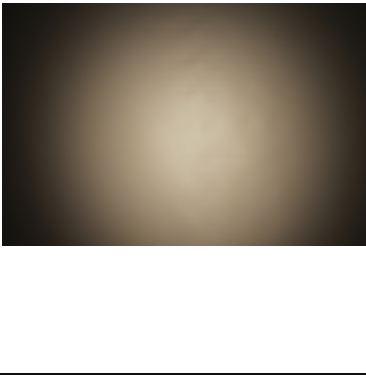
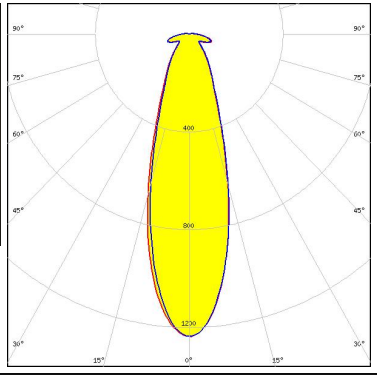


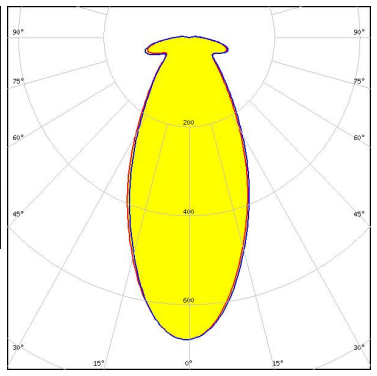
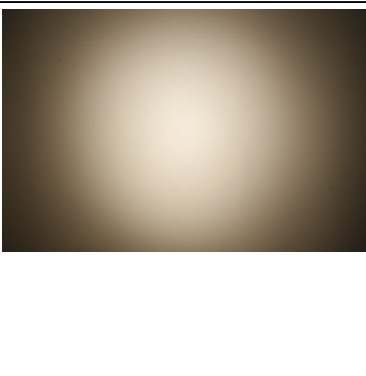
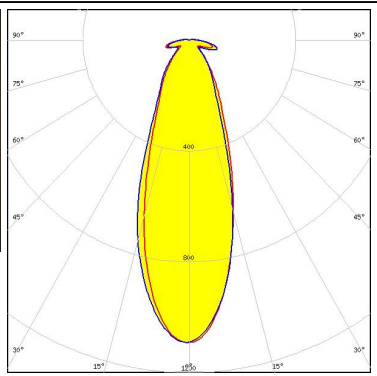

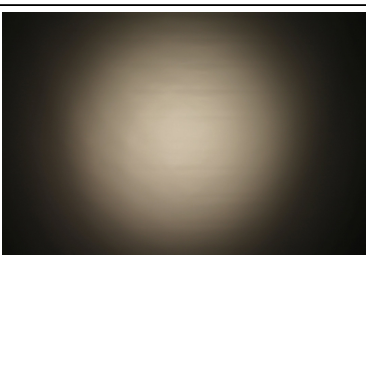
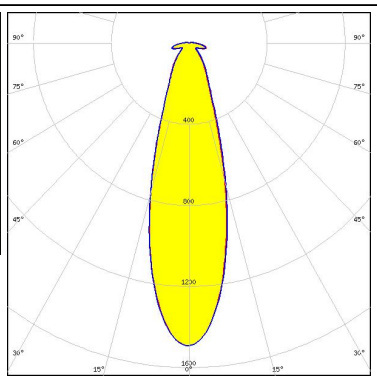
<p></p> <p>LED V18 Gen7            FWHM / FWTM 32.0° / 77.0°            Efficiency 85 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 439 Typ L3</p>		
<p></p> <p>LED V18 Gen7            FWHM / FWTM 32.0° / 77.0°            Efficiency 84 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2350</p>		
<p></p> <p>LED V22 Gen7            FWHM / FWTM 37.0° / 118.0°            Efficiency 86 %            Peak intensity 1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            TE Connectivity: 2213480-1</p>		
<p></p> <p>LED V22 Gen7            FWHM / FWTM 36.0° / 118.0°            Efficiency 84 %            Peak intensity 1 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 431 Typ Z1</p>		

#### OPTICAL RESULTS (MEASURED):

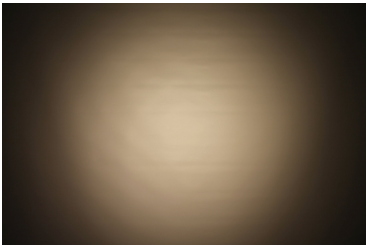
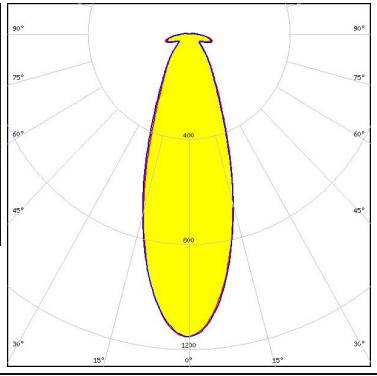
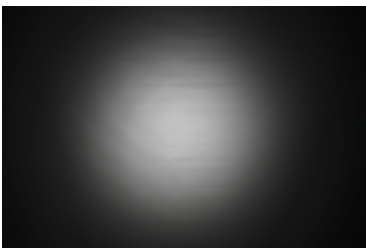
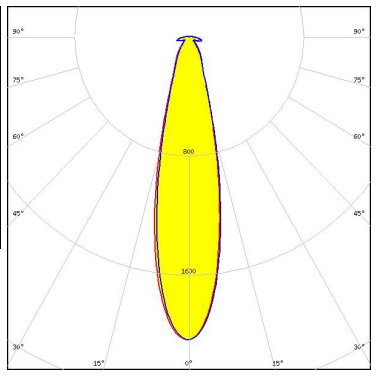
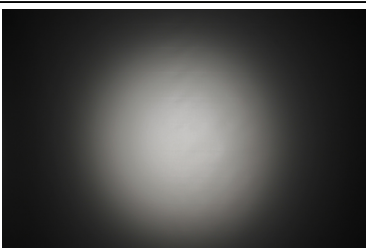
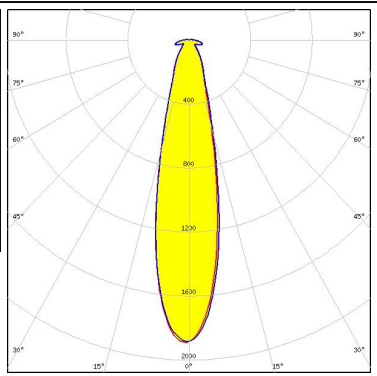
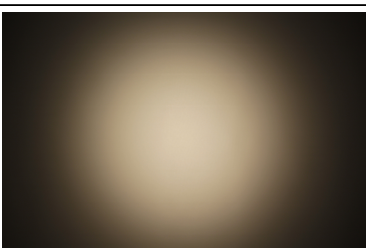
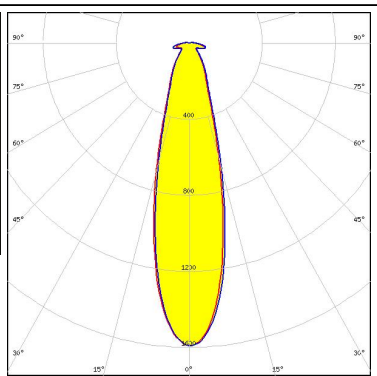
<p></p> <p>LED Vero SE 13            FWHM / FWTM 27.0° / 63.0°            Efficiency 85 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p></p> <p>LED Vero SE 18            FWHM / FWTM 31.0° / 73.0°            Efficiency 86 %            Peak intensity 1.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p></p> <p>LED Vero SE 29            FWHM / FWTM 46.0° / 161.0°            Efficiency 87 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p></p> <p>LED VERO13            FWHM / FWTM 26.0° / 62.0°            Efficiency 84 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		



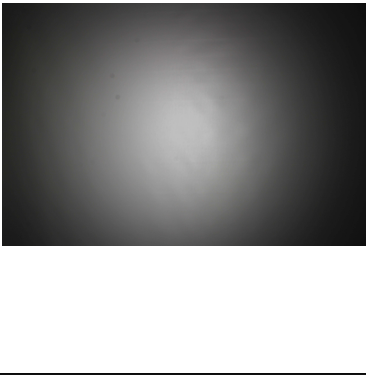
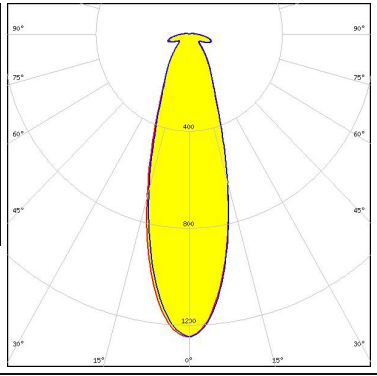

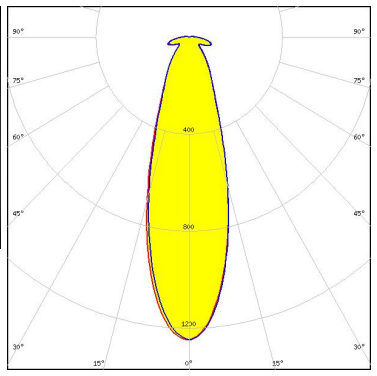

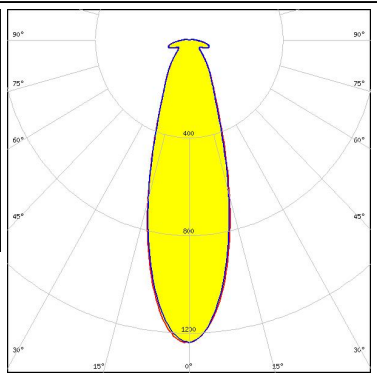
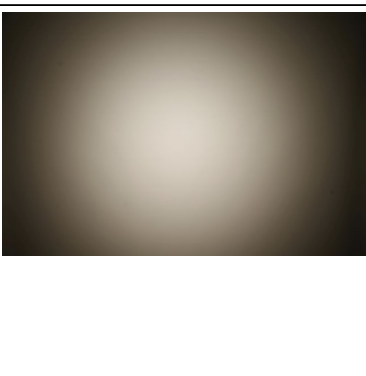
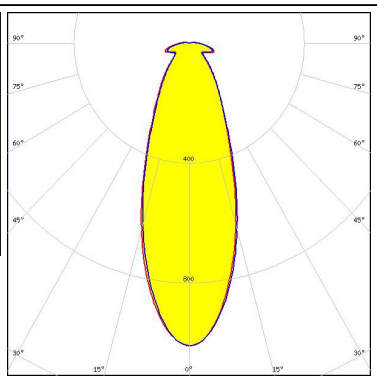
#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED VERO18            FWHM / FWTM 31.0° / 75.0°            Efficiency 85 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p></p> <p>LED VERO29            FWHM / FWTM 48.0° / 165.0°            Efficiency 87 %            Peak intensity 0.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CITIZEN</b></p> <p>LED CLL04x/CLU04x            FWHM / FWTM 36.0° / 99.0°            Efficiency 86 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p></p> <p>LED CMA2550            FWHM / FWTM 30.0° / 67.0°            Efficiency 86 %            Peak intensity 1.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

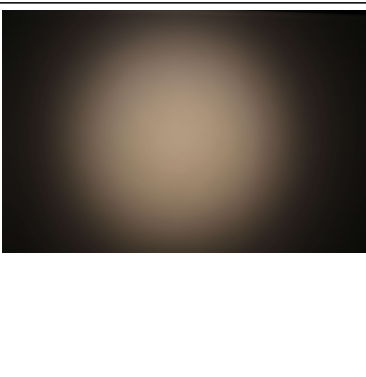
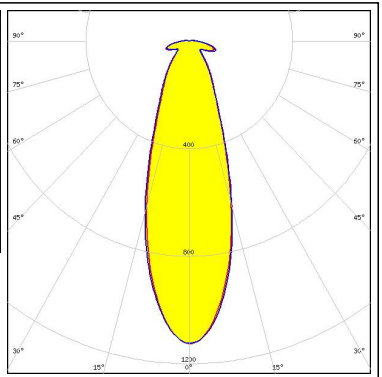

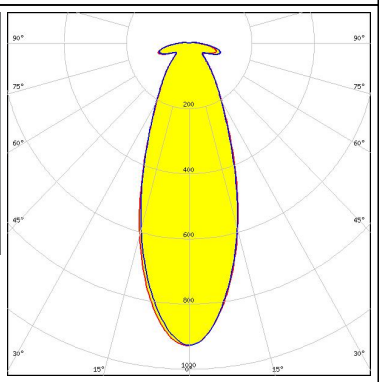

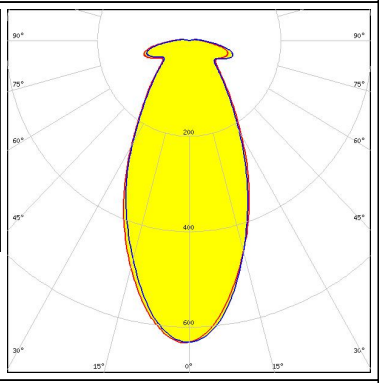

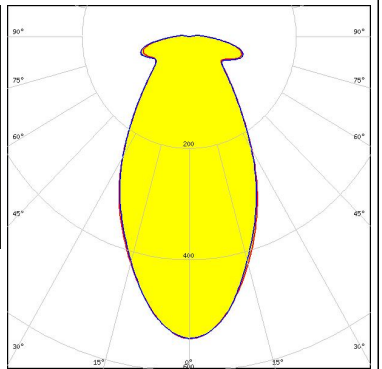
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED CMA3090            FWHM / FWTM 35.0° / 79.0°            Efficiency 88 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED CMT19xx            FWHM / FWTM 25.0° / 54.0°            Efficiency 87 %            Peak intensity 2 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 477 Typ Z1</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 1816 &amp; CXA/B 1820 &amp; CXA 1850            FWHM / FWTM 24.0° / 57.0°            Efficiency 84 %            Peak intensity 1.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 1830            FWHM / FWTM 26.0° / 64.0°            Efficiency 85 %            Peak intensity 1.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C14305_STELLA-CLAMP-CXA15-18</p>		

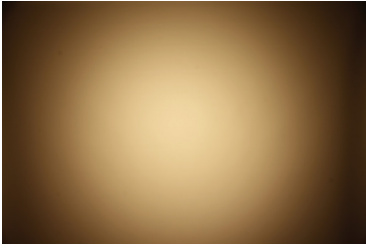
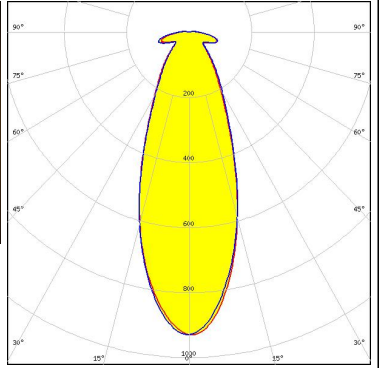

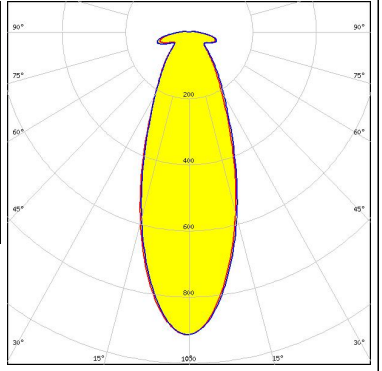
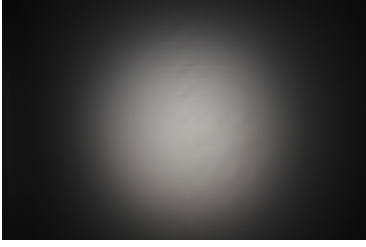
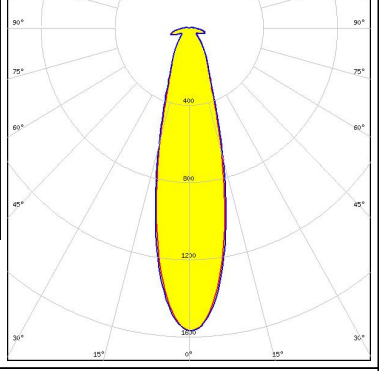
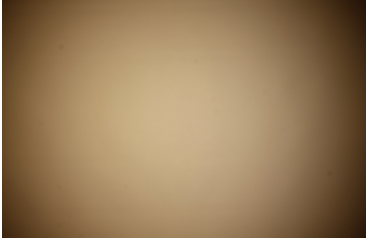
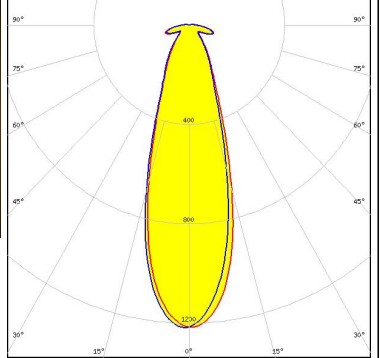
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LEDs</p> <p>LED CXA/B 25xx            FWHM / FWTM 33.0° / 120.0°            Efficiency 84 %            Peak intensity 1 cd/m            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 25xx            FWHM / FWTM 31.0° / 75.0°            Efficiency 86 %            Peak intensity 1.2 cd/m            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 25xx            FWHM / FWTM 32.0° / 76.0°            Efficiency 85 %            Peak intensity 1.2 cd/m            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 439 Typ L3</p>		
<p><b>CREE</b> LEDs</p> <p>LED CXA/B 30xx            FWHM / FWTM 37.0° / 87.0°            Efficiency 88 %            Peak intensity 1 cd/m            LEDs/each optic 1            Light colour White            Required components:            BJB: 47.319.2151</p>		

#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1211</p> <p>FWHM / FWTM 33.0° / 79.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 431 Typ L3</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1213/1216/1812</p> <p>FWHM / FWTM 39.0° / 139.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 0.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1321</p> <p>FWHM / FWTM 50.0° / 165.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 0.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON CoB 1825</p> <p>FWHM / FWTM 56.0° / 169.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 0.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### OPTICAL RESULTS (MEASURED):

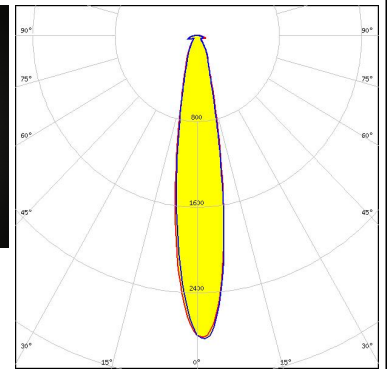
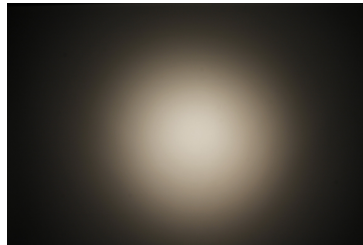
<p><b>LUMINUS</b></p> <p>LED CxM-22 (28x28)</p> <p>FWHM / FWTM 38.0° / 136.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 0.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Bender Wirth: 431 Typ L3</p>		
<p><b>NICHIA</b></p> <p>LED COB H-Type</p> <p>FWHM / FWTM 38.0° / 120.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 0.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>NICHIA</b></p> <p>LED COB J-Type</p> <p>FWHM / FWTM 26.0° / 65.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 1.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Soleriq S19</p> <p>FWHM / FWTM 32.1° / 72.5°</p> <p>Efficiency 84 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		



#### OPTICAL RESULTS (MEASURED):

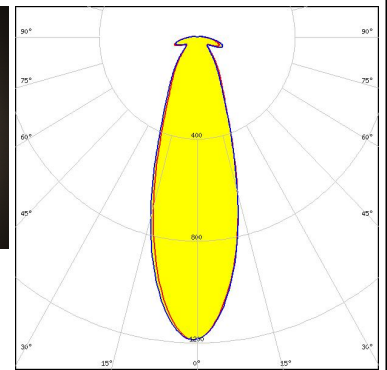
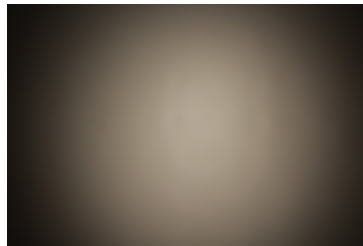
#### PHILIPS

LED Fortimo SLM L06 CoB  
 FWHM / FWTM 18.0° / 44.0°  
 Efficiency 86 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



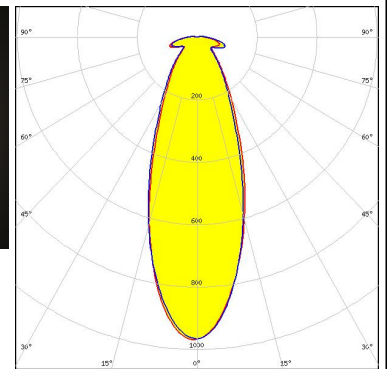
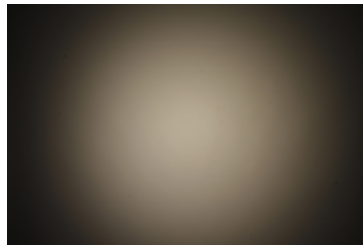
#### PHILIPS

LED Fortimo SLM L19 + SLM holder (PI)  
 FWHM / FWTM 33.0° / 78.0°  
 Efficiency 87 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



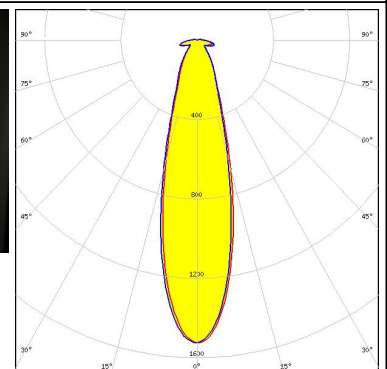
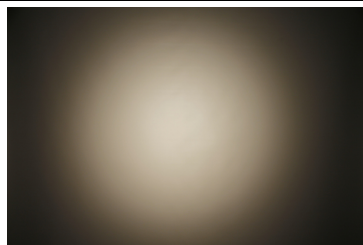
#### PHILIPS

LED Fortimo SLM L23 CoB  
 FWHM / FWTM 38.0° / 87.0°  
 Efficiency 87 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

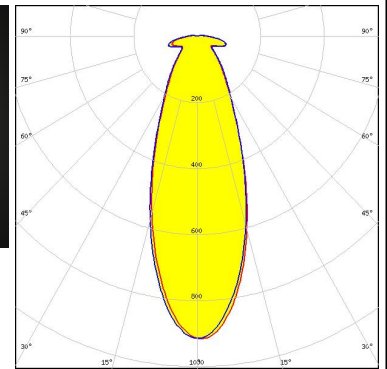
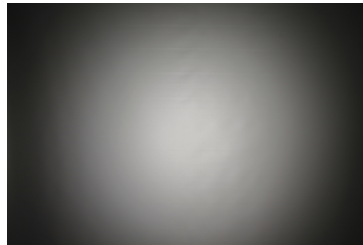
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 27.0° / 65.0°  
 Efficiency 83 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

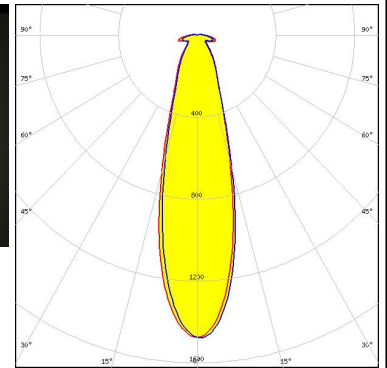
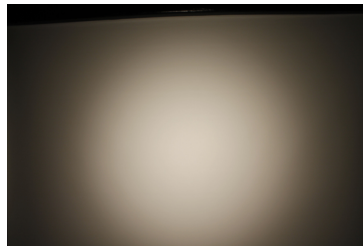
### SAMSUNG

LED LC040D / LC060D / LC080D  
 FWHM / FWTM 37.0° / 119.0°  
 Efficiency 84 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



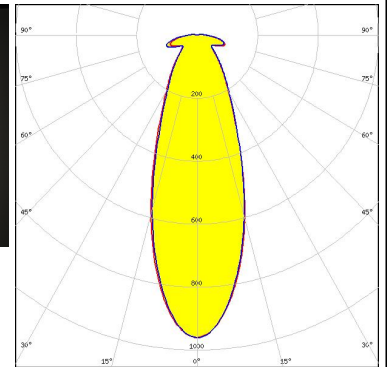
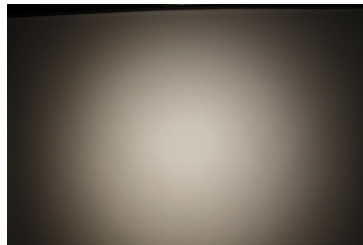
SEOUL SEMICONDUCTOR

LED MJT COB LES 14.5  
 FWHM / FWTM 28.0° / 67.0°  
 Efficiency 84 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2103CT



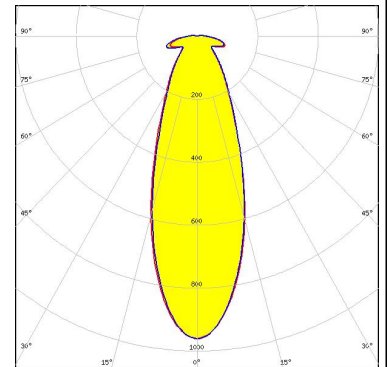
SEOUL SEMICONDUCTOR

LED MJT COB LES 22  
 FWHM / FWTM 36.0° / 118.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204CT


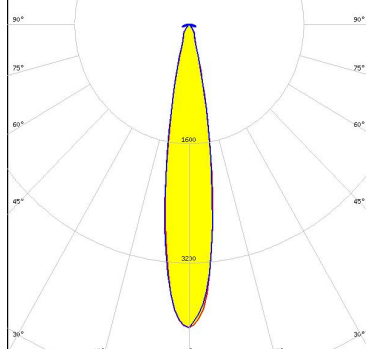

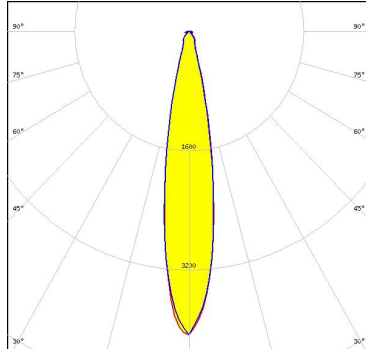

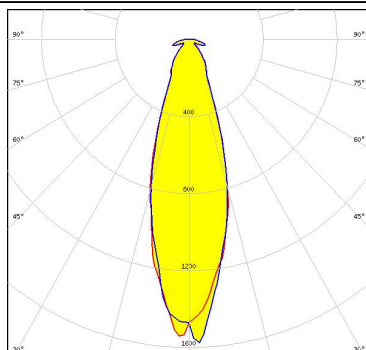
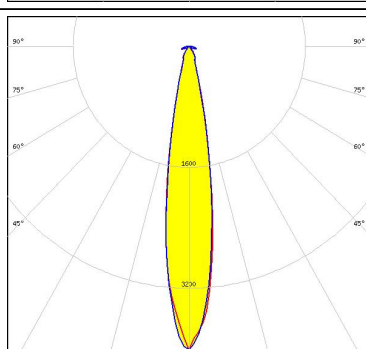


SEOUL SEMICONDUCTOR

LED MJT COB LES 22  
 FWHM / FWTM 36.0° / 118.0°  
 Efficiency 84 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 IDEAL: 50-2204CT



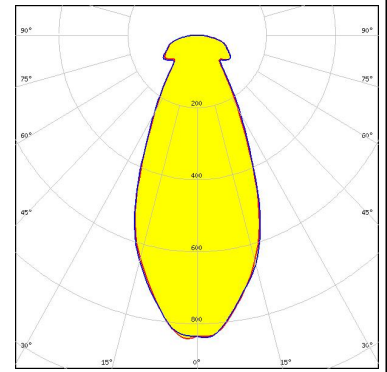
#### OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED V10 Gen7            FWHM / FWTM 18.0° / 35.0°            Efficiency 85 %            Peak intensity 4 cd/lm            LEDs/each optic 1            Light colour White            Required components:            Bender Wirth: 486 Typ L1</p>	
<p></p> <p>LED V13 Gen7            FWHM / FWTM 20.0° / 90.0°            Efficiency 86 %            Peak intensity 0.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p></p> <p>LED V22 Gen7            FWHM / FWTM 30.0° / 70.0°            Efficiency 84 %            Peak intensity 0.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:            IDEAL: 50-2204CT</p>	
<p><b>CITIZEN</b></p> <p>LED CLL02x/CLU02x (LES10)            FWHM / FWTM 17.0° / 35.0°            Efficiency 86 %            Peak intensity 4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

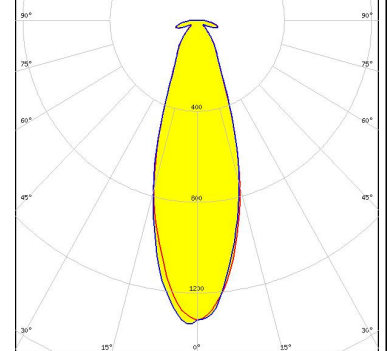
#### OPTICAL RESULTS (SIMULATED):

#### CITIZEN

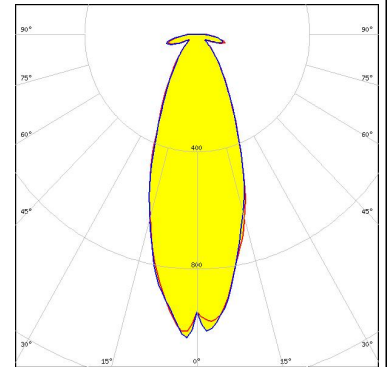
LED CLL05x/CLU05x  
 FWHM / FWTM 46.0° / 144.0°  
 Efficiency 91 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



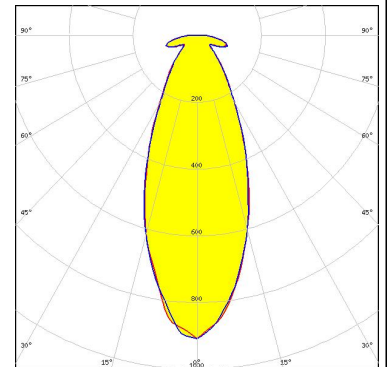
LED CMB3090  
 FWHM / FWTM 34.0° / 74.0°  
 Efficiency 85 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED CXA/B 3590  
 FWHM / FWTM 37.0° / 80.0°  
 Efficiency 83 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED CXA/B 3590  
 FWHM / FWTM 42.0° / 153.0°  
 Efficiency 85 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

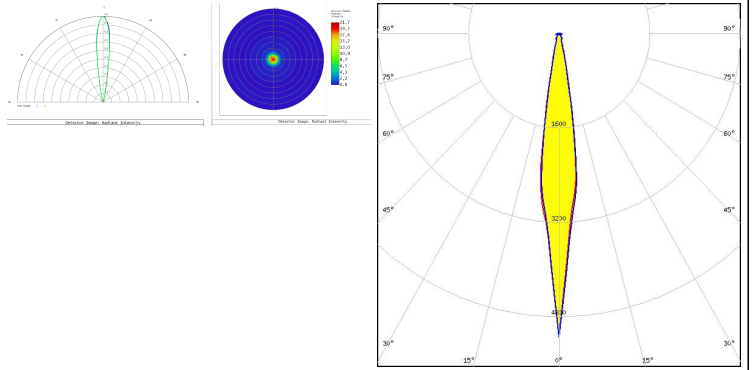


#### OPTICAL RESULTS (SIMULATED):

**LITEON**

LED LTPL-G35UV275GR-E  
 FWHM / FWTM 16.0° / 26.0°  
 Efficiency 61 %  
 LEDs/each optic 4  
 Light colour UV-C  
 Required components:

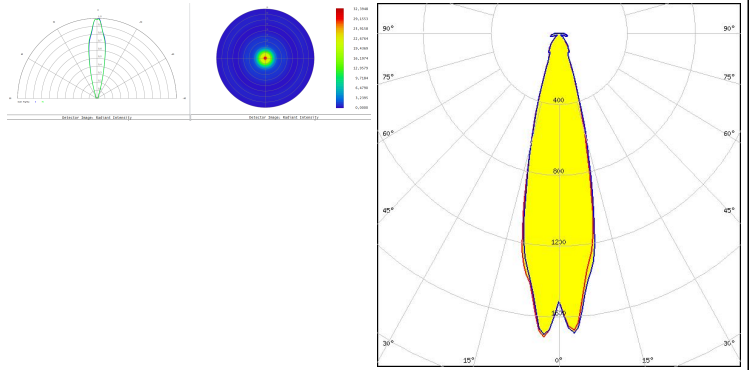
The UVC LED result tolerance is ±10 %



**LITEON**

LED LTPL-G35UV275GR-E  
 FWHM / FWTM 23.0° / 40.0°  
 Efficiency 59 %  
 LEDs/each optic 13  
 Light colour UV-C  
 Required components:

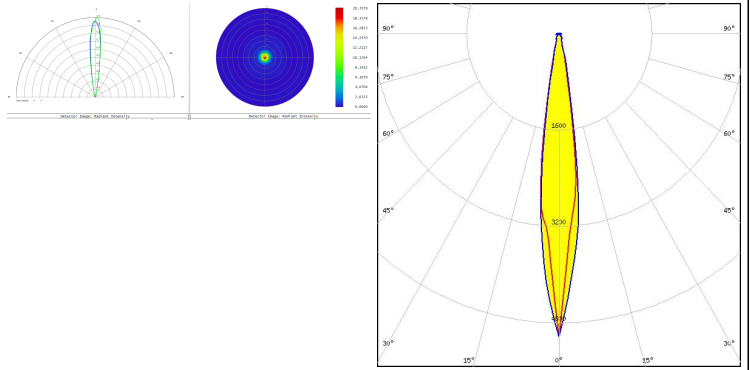
The UVC LED result tolerance is ±10 %



**LITEON**

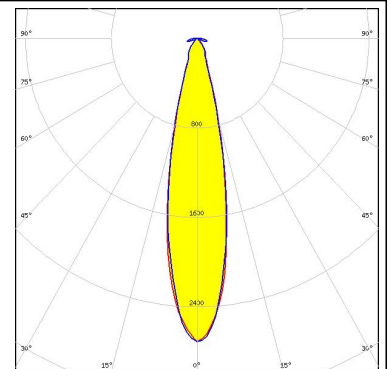
LED LTPL-G35UV275GR-E  
 FWHM / FWTM 14.0° / 25.0°  
 Efficiency 60 %  
 LEDs/each optic 3  
 Light colour UV-C  
 Required components:

The UVC LED result tolerance is ±10 %



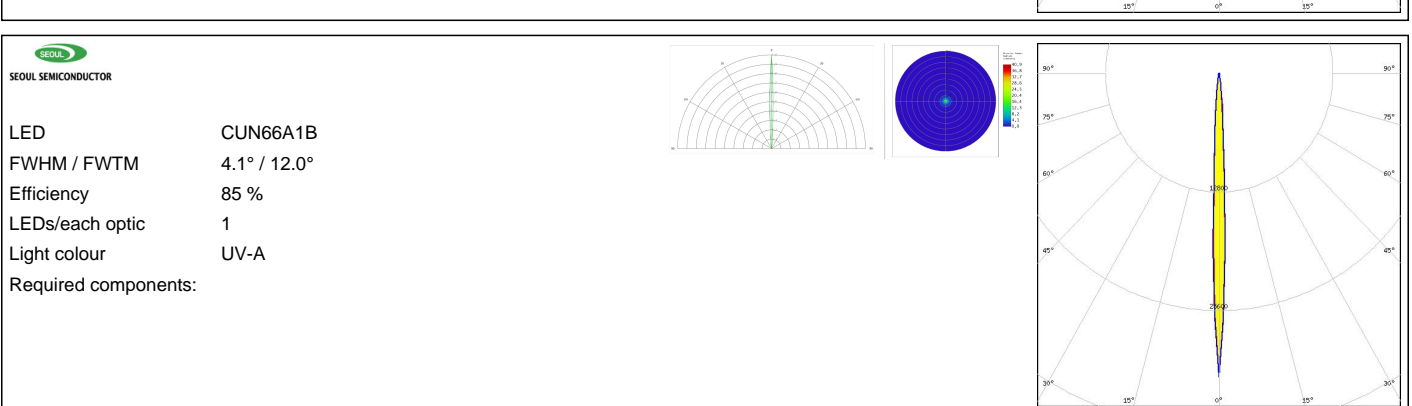
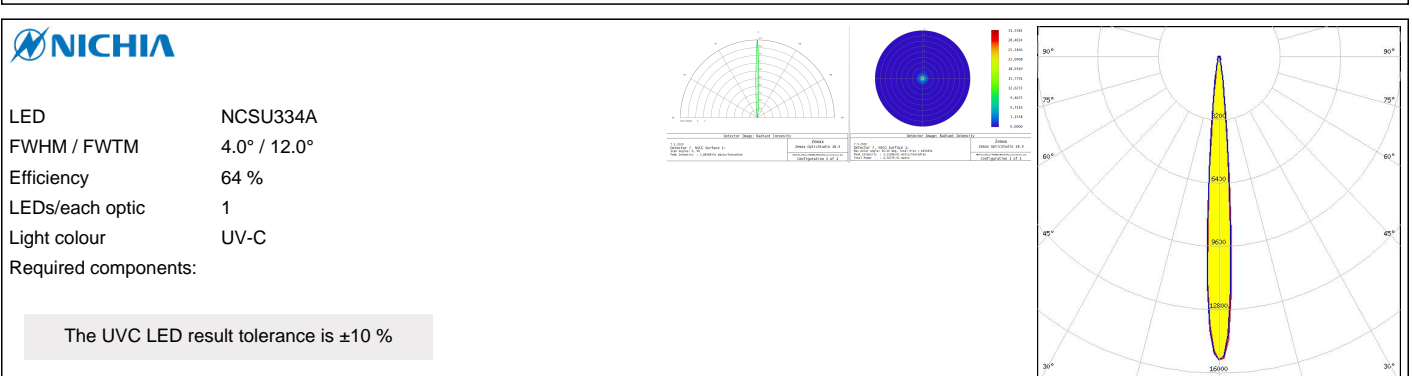
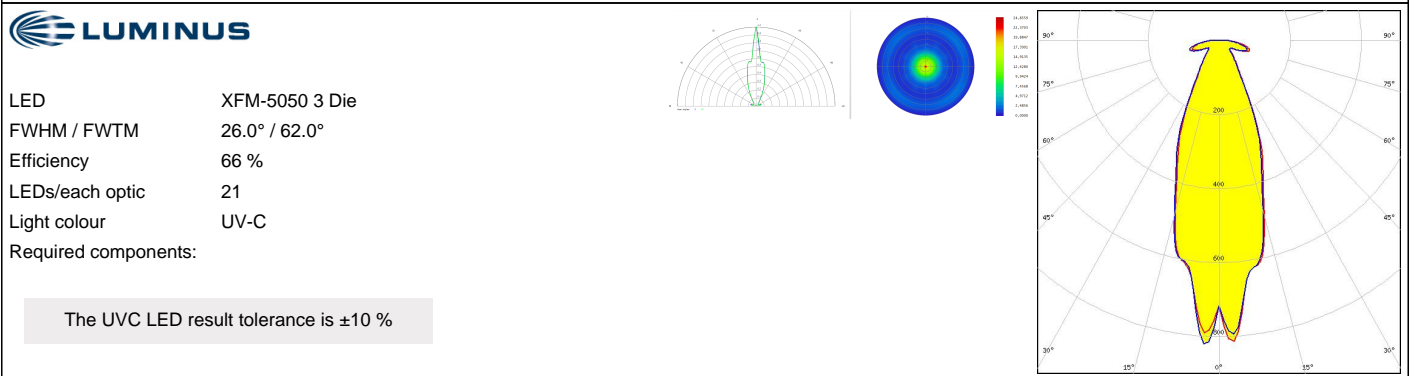
**LUMILEDS**

LED LUXEON CoB 1208  
 FWHM / FWTM 23.0° / 43.0°  
 Efficiency 82 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:





### OPTICAL RESULTS (SIMULATED):



#### OPTICAL RESULTS (SIMULATED):

